



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/804,080

03/13/2001

Satoshi Arakawa

Q61195

9113

7590

07/22/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

LEE, SHUN K


ART UNIT

PAPER NUMBER

2878

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/804,080	ARAKAWA ET AL.	
	Examiner	Art Unit	
	Shun Lee	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) 3,5-10,12 and 13 is/are withdrawn from consideration.
5) ☒ Claim(s) 4 and 16 is/are allowed.
6) ☒ Claim(s) 1,2,11,14,15,17 and 18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 March 2001 and 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I and Species A (claims 1, 2, 4, and 11) in Paper No. 8 is acknowledged.
2. Claims 3 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.
3. Claims 6-10, 12, and 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8.

Claim Objections

4. Claim 1 is objected to because of the following informalities: in claim 1, "the two corner areas" on lines 9-10 should probably be --two corner areas, which are among the four corner areas of the radiation image storage panel--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 2, 11, 14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma (US SIR H1201) in view of Hosoi *et al.* (US 4,880,987) and Verbeke *et al.* (US 5,519,229).

In regard to claims **1**, **14**, and **15**, Sakuma discloses (Fig. 3) a radiation imaging panel (3, 5, or 7) having a rectangular shape, wherein the shape of the radiation imaging panel is asymmetric with respect to a center axis of the radiation imaging panel, which center axis extends in an antero-posterior direction of the radiation imaging panel.

While Sakuma also discloses (column 6, lines 40-42) a local contour being distinct from other portions, the radiation imaging panel (3, 5, or 7) of Sakuma lacks an explicit description that the distinct local contour is a projecting region, a right angle, or a different radius and that it is a storage panel comprising a stimutable phosphor layer overlaid on the front surface side of a transparent substrate wherein the front surface side of the transparent substrate faces a radiation source. However, storage panels are well known in the art. For example, Hosoi *et al.* teach (Fig. 5; column 6, lines 14-17) a storage panel (1) comprises a stimutable phosphor layer (1B) overlaid on a front surface side of a transparent substrate (1A) and (column 5, lines 3-14) that the storage panel (1)

is position so that radiation is incident from the side opposite the transparent substrate (1A). Thus it is well known in the prior art that a storage panel comprising a stimuable phosphor layer overlaid on the front surface side of a transparent substrate wherein the front surface side of the transparent substrate faces a radiation source.

In addition, Sakuma also discloses (Fig. 3) that when a shaped radiation imaging panel (3, 5, or 7) is used within a correspondingly shaped X-ray photography cassette (4, 6, or 8, respectively), the front side of the radiation imaging panel (3, 5, or 7) can be positioned properly (column 1, lines 23-33) within the X-ray photography cassette (4, 6, or 8, respectively). Further, Verbeke *et al.* teach (in the description of the prior art from line 15 in column 1 to line 13 in column 2) it is known in the radiography art that a storage panel offers the advantages of re-usability and better image resolution at lower dosages for a patient and that typically the storage panel is used within conventional X-ray photography cassettes. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a well known storage panel with a projecting region (*e.g.*, a right angle or a different radius) as the radiation imaging panel (3, 5, or 7) with a distinct local contour of Sakuma, in order to obtain better image resolution at lower patient dosages while ensuring proper positioning of the well known storage panel within the X-ray photography cassette.

In regard to claim 2 which is dependent on claim 1, Sakuma also discloses (Fig. 3) that a shape (I) of one corner area, which is among four corner areas of the radiation imaging panel (3, 5, 7), is different from shapes of the other three corner areas.

In regard to claim **11** (which is dependent on claim 1), claim **17** (which is dependent on claim 14), and claim **18** (which is dependent on claim 15), Sakuma also discloses (Fig. 3) a cassette (4, 6, or 8), comprising an accommodating section for accommodating a radiation imaging panel (3, 5, 7) as defined in claims 1, 14, or 15, wherein the accommodating section has a shape (I') such that, due to the asymmetric shape of the radiation imaging panel (3, 5, 7), the radiation imaging panel (3, 5, 7) is prevented from being accommodated in the accommodating section with a front surface and a back surface of the radiation imaging panel (3, 5, 7) being reversed.

Allowable Subject Matter

8. Claims 4 and 16 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: the instant application is deemed to be directed to a nonobvious improvement over the invention disclosed in US SIR H1201. The improvement comprises in combination with other recited elements, that a hole is formed only at one corner area, which is among four corner areas of the radiation imaging panel, or in the vicinity of the one corner area.

Response to Arguments

10. Applicant's arguments filed 12 May 2004 have been fully considered but they are not persuasive.

Applicant argues (pg. 8 of remarks filed 12 May 2004) that a projecting region, a right angle, or a different radius are not taught in the cited prior art. Examiner respectfully disagrees. Sakuma states (column 6, lines 40-42) that "a local film portion

at a peripheral location of the film which has a local film contour being distinct from other portions of the film". Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a projecting region (e.g., a right angle or a different radius) as the distinct local contour of Sakuma.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shun Lee whose telephone number is (571) 272-2439. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SL


DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800